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09/722,174	11/25/2000	Kia Silverbrook	NPA081US	3854
24011 7590 04/03/2008 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
			EXAMINER	
			GRAHAM, CLEMENT B	
			ART UNIT	PAPER NUMBER
			3692	
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			04/03/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/722,174

**Applicant(s)**

SILVERBROOK ET AL.

**Examiner**

CLEMENT B. GRAHAM

**Art Unit**

3692

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 8-25, 27-31, 36-40 and 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8-25, 27-31, 36-40, 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 3692

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/2007 has been entered.

2. Claims 1-3, 5, 8-25, 27-31, 33-40, 42-47, remained pending.

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

3. Claims 1-3, 5, 8-25, 27-31, 33-40, 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perazza patent (5,326,959) in view of Sekendur U.S Patent 5, 477, 012 in view of O'Donnell, Jr U.S Patent 6, 573, 887.

As per claim 1, Perazza discloses a method of enabling payment of a bill, said method comprising the steps of:  
providing a bill containing information relating to a requested payment, the bill including a plurality of tags, each tag containing coded data indicative of an identity of the bill and of a location of that tag on the bill, placing an optically imaging ("i. e, suitable optical character reader" see column 5 lines 30-35")  
an operative position relative to the bill;  
imaging a tag (see column 5-7 lines 1-67 and column 18 lines 27-67)  
generating indicating data in the using the coded data contained in the image tag said indicating data regarding the identity of the bill and the position of a nib of the pen

relative to the bill; and transmitting the indicating data to a computer system such that the computer system can identify from the indicating data at least one parameter relating to the requested payment and enable payment of the bill. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

Perazza fail to explicitly teach pen having a nib.

However sckendur discloses provide a system that most closely emulates the use of pen and paper. Accordingly, the present invention proposes the use of a surface (paper) formatted with a position-related coding means for indicating X-Y coordinates capable of reflecting a frequency of light. The stylus (pen) has a light source of a frequency for illuminating the surface. The frequency of light is absorbed by the surrounding surface but reflected by the coding means back into the stylus onto a charge-coupled device (CCD) chip located within the stylus. The information is sent to a computer for processing and finally output to the user. The frequency(s) of light to be used depends on the application. For example, infrared light and light reflecting means can be used for hand writing on paper to be invisible and not interfere with the written text. (see column 4 lines 1-67 and column 5 lines 1-35 and column 2 lines 1-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Perazza include pen having a nib taught by sckendur in order to generate computer data from obtaining and outputting the position and/or movement of a moveable element in a data space, in two or three dimensions, such as might be used for determining the position and/or movement of a pen on or over paper.

Perazza and sckendur fail to explicitly teach computing a position of the nib from an observed prospective distortion on the image tag and a known geometry of pen or pen optics.

However O'Donnell, Jr discloses as the pen is used to write, the writing tip is depressed slightly so as to signal to the built-in microprocessor that the positional change is due to creating a character or stroke and not to non-writing positional changes required for crossing the T or dotting the I or J, punctuation, word spacing, alphabetical letter printing, symbols, editing, table formation, drawing, mathematical formulas, and the like.

For the purposes herein, we define character generation as the strokes of writing that make contact between the writing tip and the writing surface. Alternatively, the device can contain a button, which must be depressed during character generation in order, for example, to expose the writing tip. Alternatively, a strain gauge can be used to detect pressure on the writing tip during contact with the writing surface, or a microaccelerometer can be used to identify the very sudden changes in acceleration due to resistance of the pen against the writing surface that is evident in writing as opposed to nonwriting positional changes. When the writing device is repositioned to execute non-writing positional functions as opposed to character generation, it is important that the position in the document be tracked by the microprocessor.(see column 4 lines 23-67 and column 5 lines 1-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Perazza and skendur to include computing a position of the nib from an observed prospective distortion on the image tag and a known geometry of pen of pen optics taught by O'Donnell, Jr in order to generate contemporaneous digital copies of whatever is written.

As per claim 2, Perazza discloses in which said at least one parameter relating to the requested payment is associated with at least one zone of the bin and in which the method includes identifying, in the computer system and from the zone relative to which the pen("i. e, suitable optical character reader") see column 5 lines 30-35") is located, said at least one parameter. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 3, Perazza discloses which includes receiving, in the computer system, data regarding movement of the device pen ("i. e, suitable optical character reader") see column 5 lines 30-35") relative to the bill, the pen sensing its movement relative to the bill using at least some of the coded date:, and identifying, in the computer system and from said movement being at least partially within said at least one zone, said at least one parameter of the requested payment. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 5, Perazza discloses the method including further steps of:

receiving, in the computer system, data from the pen("i. e, suitable optical character reader" see column 5 lines 30-35") regarding an identity of a person associated with the pen identifying, in the computer system and from the data regarding the identity of the person the requested payment. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 8, Perazza discloses in which the at least one parameter is an action parameter of the requested payment, the method including affecting, in the computer system, an operation in respect of the action parameter. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 9, Perazza discloses in which the action parameter of the requested payment is selected from the group comprising:  
requesting that payment be made, specifying a payment amount or resetting the bill to an original state. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 10, Perazza discloses in which the parameter is an option parameter of the requested payment, the method including identifying, in the computer system, that the person has entered a hand-drawn mark by means of the pen ("i. e, suitable optical character reader" see column 5 lines 30-35") and effecting, in the computer system, an operation associated with the option parameter. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 11, Perazza discloses in which the option parameter is associated with at least one of cardholder name, payment method or credit card type. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 12, Perazza discloses in which the parameter is a text parameter of the requested payment, the method including identifying, in the computer system, that the person has entered handwritten text data by means of the pen("i. e, suitable optical character reader" see column 5 lines 30-35") effecting, in the computer system, an operation associated with the text parameter. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 13, Perazza discloses which includes converting, in the computer system, the handwritten text data("i. e, suitable optical character reader" see column 5 lines 30-35") to computer text. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 14, Perazza discloses in which the text parameter is associated with at least one of a cardholder name, an amount paid or a card expiry date. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 15, Perazza discloses in which the at least one parameter is an authorization parameter of the requested payment, the method including identifying, in the computer system, that the person has entered a handwritten signature by means of the pen("i. e, suitable optical character reader" see column 5 lines 30-35") effecting, in the computer system, an operation associated with the authorization parameter. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 16, Perazza discloses which includes verifying, in the computer system, that the signature is that of the person. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 17, Perazza discloses in which the authorization parameter is associated with payment authorization. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 18, Perazza discloses which includes enabling the person to print the bill on demand. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 19, Perazza discloses which includes printing the bill on a surface and, at the same time that the bill is printed, printing the coded data on the surface. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 20, Perazza discloses which includes printing the coded data to be invisible to an average unaided human eye. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 21, Perazza discloses which includes retaining a retrievable record of each bill generated, the bill being retrievable using its identity as contained in its coded data. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 22, Perazza discloses which includes distributing a plurality of the bills using a mixture of multicast and pointcast communications protocols. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 23, Perazza discloses in which the pen contains identity data which imparts a unique identity to the pen("i. e, suitable optical character reader" see column 5 lines 30-35") and identifies it as being associated with the person and in which the method includes monitoring, in the computer system, said identity. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 24, Perazza discloses which includes providing all required information relating to the requested payment in the bill to eliminate the need for a separate display device. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 25, Perazza discloses 25. (Currently Amended) The method of claim 1 in which the bill is printed on multiple pages and in which the method includes binding the pages. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 27, Perazza discloses wherein:  
a printer associated with the pen("i. e, suitable optical character reader" see column 5 lines 30-35") is caused to print a payment receipt after a payment has been completed. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 28, Perazza discloses whereon the payment receipt comprises coded data indicative of the identity of the receipt. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 29, Perazza discloses a system for enabling payment of bills, said system comprising:  
a bill containing information relating to a requested payment, the bill including a plurality of tags, each tag containing coded data indicative of an identity of the bill and of a



location of that tag on the bill imaging ("i. e, suitable optical character reader" see column 5 lines 30-35")

an optically imaging comprising:

a nib, generating indicating using the coded data contained in the image tag said indicating data regarding the identity of the bill and the position of a relative to the bill see column 5-7 lines 1-67 and column 18 lines 27-67) and a transmitter for transmitting the indicating data to a computer system;

and, the computer system for receiving the indicating data from the optically imaging pen and identifying, using the received indicating data, at least one parameter relating to the requested payment.(Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

Perazza fail to explicitly teach a nib of the pen.

However sckendur discloses provide a system that most closely emulates the use of pen and paper. Accordingly, the present invention proposes the use of a surface (paper) formatted with a position-related coding means for indicating X-Y coordinates capable of reflecting a frequency of light. The stylus (pen) has a light source of a frequency for illuminating the surface. The frequency of light is absorbed by the surrounding surface but reflected by the coding means back into the stylus onto a charge-coupled device (CCD) chip located within the stylus. The information is sent to a computer for processing and finally output to the user. The frequency(s) of light to be used depends on the application. For example, infrared light and light reflecting means can be used for hand writing on paper to be invisible and not interfere with the written text.(see column 4 lines 1-67 and column 5 lines 1-35 and column 2 lines 1-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Perazza suitable optical character reader to include a pen or nib of the pen taught by sckendur in order to generate computer data from obtaining and outputting the position and/or movement of a moveable element in a data space, in two or three dimensions, such as might be used for determining the position and/or movement of a pen on or over paper.

Perazza and sckendur fail to explicitly teach computing a position of the nib from an observed prospective distortion on the image tag and a known geometry of pen of pen optics.

However O'Donnell, Jr discloses as the pen is used to write, the writing tip is depressed slightly so as to signal to the built-in microprocessor that the positional change is due to creating a character or stroke and not to non-writing positional changes required for crossing the T or dotting the I or J, punctuation, word spacing, alphabetical letter printing, symbols, editing, table formation, drawing, mathematical formulas, and the like. For the purposes herein, we define character generation as the strokes of writing that make contact between the writing tip and the writing surface. Alternatively, the device can contain a button, which must be depressed during character generation in order, for example, to expose the writing tip. Alternatively, a strain gauge can be used to detect pressure on the writing tip during contact with the writing surface, or a microaccelerometer can be used to identify the very sudden changes in acceleration due to resistance of the pen against the writing surface that is evident in writing as opposed to nonwriting positional changes. When the writing device is repositioned to execute non-writing positional functions as opposed to character generation, it is important that the position in the document be tracked by the microprocessor.(see column 4 lines 23-67 and column 5 lines 1-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Perazza and sckendur to include computing a position of the nib from an observed prospective distortion on the image tag and a known geometry of pen of pen optics taught by O'Donnell, Jr in order to generate contemporaneous digital copies of whatever is written.

As per claim 30, Perazza discloses in which said at least one parameter relating to the requested payment is associated with at least one zone of the bill. .(see column 4 lines 1-67 and column 5 lines 1-35 and column 2 lines 1-67).

As per claim 31, Perazza discloses which includes the pen ("i. e, suitable optical character reader" see column 5 lines 30-35")

the pen sensing its movement relative to the bill using at least some of the coded data. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 33, Perazza discloses wherein the computer system is configured for receiving from the pen data regarding identity of a person associated with the pen("i. e, suitable optical character reader" see column 5 lines 30-35") identifying from said received data a requested payment, the pen containing the data regarding the identity of the person. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 34, Perazza discloses in which the coded data is also indicative of at least one parameter of the requested payment, the computer system receiving indicating data from the pen ("i. e, suitable optical character reader" see column 5 lines 30-35") regarding said at least one parameter of the requested payment, and the pen sensing the indicating data using at least some of the coded data. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 35, Perazza discloses which includes the pen("i. e, suitable optical character reader" see column 5 lines 30-35"), the pen sensing its movement relative to the bill. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 36, Perazza discloses in which said at least one parameter of the requested payment is selected from the group comprising an action parameter of the requested payment, an option parameter of the requested payment, a text parameter of the requested payment, or an authorization parameter of the requested payment. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 37, Perazza discloses in which the action parameter of the requested payment is selected from the group comprising: requesting that payment be made, specifying a payment amount, or resetting the bill to an original state. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 38, Perazza discloses in which the option parameter is associated with at least one of cardholder name, payment method, or credit card type. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 39, Perazza discloses in which the text parameter is associated with at least one of a cardholder name, an amount paid, or a card expiry date. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 40, Perazza discloses in which the authorization parameter is associated with payment authorization. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 42, Perazza discloses in which the pen contains identity data which imparts a unique identity to the pen ("i. e, suitable optical character reader" see column 5 lines 30-35") and identifies it as being associated with a particular person.

As per claim 43, Perazza discloses in which the bill is printed on a surface and in which the system includes a printer for printing the bill on demand. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 44, Perazza discloses in which the printer prints the coded data at the same time as printing the bill or payment receipt. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 45, Perazza discloses in which the coded data is substantially invisible. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 46, Perazza discloses which includes a database for keeping a retrievable record of each bill generated, each bill being retrievable by using its identity as included in its coded data. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

As per claim 47, Perazza discloses in which, to cater for a bill printed on multiple pages, the printer includes a binder for binding the pages. (Note abstract and see column 5-7 lines 1-67 and column 18 lines 27-67).

### **Conclusion**

4. Applicant's arguments filed on 12/23/2007 have been fully considered but they are moot in view of new grounds of rejections.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 571-272- 6795. The examiner can normally be reached on 7am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on 571-212-6702. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

/Kambiz Abdi/

Supervisory Patent Examiner, Art  
Unit 3692

CG

March 25, 2008